

The Big Five Personality as a Correlate of Involvement in Violence among Students in Secondary Schools in Nyando Sub-County, Kenya

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Abstract: Involvement in violence among students is a common menace not only in Nyando Sub-county, Kenya but also in the whole world. Establishing a link between the big five personality and involvement in violence could be useful in developing various personality based interventions to involvement in violence. This prompted the present study to investigate both qualitative and quantitative relationship between the big five personality and involvement in violence. The convergent parallel mixed method research design was used. A multistage random sampling was used to generate a sampling size of 418 students. A part from the students, teacher counselors and deputy head teachers were also interviewed in order to triangulate the sources of information. Both self report questionnaires and interview schedules were used to collect data. The results indicated that extraversion and neuroticism were positively correlated to violence at correlation coefficients $r = 0.155$ and $r = 0.102$ respectively. While agreeableness, conscientiousness and openness were negatively correlated to violence at correlation coefficients $r = -0.101$, $r = -0.425$ and $r = -0.187$ respectively. This implied that as the extroversive and neurotic tendencies rose, the levels of involvement in violence also rose in the population. Conversely as the agreeable, conscientious and openness tendencies rose, the levels of involvement in violence reduced significantly. Therefore to minimize involvement in violence, more interventional measures should be applied to people who display more of extraversion and neuroticism.

Key Words: Extraversion; Conscientiousness; Openness; Agreeableness; Neuroticism; Violence.

I. INTRODUCTION

Involvement in violence among students is a common menace not only in Nyando Sub-county, Kenya but also in the whole world as evident by different reviewed studies. According to Youth Risk Behavior Surveillance System, on top of the top six listed risky behaviors among young people in USA were behaviors that contribute to unintentional injuries and violence (CDC report, 2011). Williams (2009) in Australia reported that 14.5% of boys and 3.1% of girls were involved in violent behavior while 8.8% of boys and 3.6% of girls were involved in antisocial behaviors. Reddy (2013) in South Africa reported that over 17% of young people carried weapons and 41% had been bullied, 14% belonged to gangs, and 10% had been forced to have sex. In Kenya specifically to the study area, according to Kenya inter-Agency Rapid Assessment report (2014), about three out of five children in Nyando sub-county (62% aged 2-14 years) were predisposed

to different forms of violence and 31% abuse different forms of drugs. Inter-clan tension over political power was believed to be the source of violence. The sub-county also borders Nandi County and there had been a lot of border disputes and ethnic violence due to cattle rustling and struggle for resources (KIRA, 2014).

With regard to theoretical framework of personality, the present study adopted the Five-Factor personality model instead of the other famous models of personality because it provided one of the most elaborate explanations of personality since 1990s, with increasing evidence to support the big five traits over other models (Hirsh & Peterson, 2008). The Five-Factor model, which was advanced by Goldberg, Costa and Mc Crae in 1990s, classifies personality into openness to experience, conscientiousness, extraversion, agreeableness and neuroticism (Paunonen & Jackson, 2000). The broad dimension of extraversion encompasses such more specific traits as talkative, energetic, and assertive. Agreeableness includes traits like sympathetic, kind, and affectionate. Conscientiousness includes traits like organized, thorough, and planful. Neuroticism includes traits like tense, moody, and anxious. Openness to Experience includes traits like having wide interests, and being imaginative and insightful (Srivastava, 2016).

Establishing a link between the big five personality and involvement in violence could be useful in developing various personality based interventions to involvement in violence. This prompted the present study to investigate both qualitative and quantitative relationship between the big five personality and involvement in violence. The study tested the following hypotheses: H_0 [the null hypothesis]: There is no significant relationship between the big five personality and involvement in Violence. H_A [the alternative hypothesis]: There is a significant relationship between the big five personality and involvement in Violence.

II. METHODOLOGY

The convergent parallel mixed method research design (Creswell, 2014) was used. A multistage random sampling was used to generate a sampling size of 418 students. A part from the students, 26 teacher counselors and 26 deputy head teachers were also interviewed in order to triangulate the sources of information. Both self report questionnaires (of

reliability coefficient 0.880) and interview schedules were used to collect data. The quantitative data was analyzed using frequencies, percentages, means, standard deviations and Pearson’s correlation. On the other hand, qualitative data was analyzed through content analysis. The results were presented using tables and figures.

III. RESULTS AND DISCUSSION

In this section the results of the study were discussed based on the four major sub-headings: response rates, demographic characteristics, distribution of responses on personality scales, distribution of responses on the violence scales, qualitative relations between personality and violence and the Pearson’s correlation results.

Respondents’ Response Rates

Table 1: Respondents’ Response Rate Summary

Disposition of Sampled Elements	Eligible Sampled Elements	Usable Responses	Response Rate
Students	418	397	94.98%
Teacher Counselors	26	21	80.77%
Deputy Head Teachers	26	22	84.62%
Questionnaire Items	40,128	38,112	94.98%

The respondents’ response rates (students = 94.98%, teacher counselors = 80.77%, deputy head teachers = 84.62%) for the study were sufficient in that they were far above the 50% bench-mark rate proposed by US Government Accountability Office (2017). This high response rate enhanced the validity and reliability of the study.

Respondents’ Demographic Characteristics

In this study, several demographic characteristics of students, teacher counselors and deputy head teachers were considered. Table 2 clearly arrayed the demographic characteristics of the respondents.

Table 2: Demographic Characteristics of Respondents

Demographic Characteristics		Response Categories		
		Students	Teacher Counselors	Deputy Head Teachers
Age Brackets (students)	Below 15yrs	18 (5%)		
	15 – 18yrs	300 (76%)		
	Above 18yrs	79 (20%)		
Gender	Male	188 (47%)	9 (43%)	12 (55%)
	Female	209 (53%)	12 (57%)	10 (45%)
Class Form	Form 1	118 (30%)		
	Form 2	80 (20%)		
	Form 3	99 (25%)		
	Form 4	100 (25%)		
Income	Low	67 (17%)		

Status of students’ family	Medium	319 (80%)		
	High	11 (3%)		
Parenting background of students	Single parenthood	84 (21%)		
	Divorced/separated	11 (3%)		
	Orphaned	21 (5%)		
	Living with both parents	281 (71%)		
School type	Mixed	157 (40%)	7 (33%)	8 (36%)
	Boys	114 (29%)	7 (33%)	7 (32%)
	Girls	126 (31%)	7 (33%)	7 (32%)
Years of service	Below 5yrs		3 (14%)	0 (0%)
	Above 5yrs		18 (86%)	22 (100%)
Experience in Counseling	Below 5yrs		5 (24%)	2 (9%)
	Above 5yrs		16 (76%)	20 (91%)
Total		397	21	22

Majority of the students were in age bracket 15 – 18yrs (76%) while few in age brackets below 15yrs (5%) and above 18yrs (20%). This data was typical of high school age bracket in Kenya. The study was gender balanced for students (Male = 47%, Female = 53%), teacher counselors (Male = 43%, Female = 57%) and deputy head teachers (Male = 55%, 45%). The respondents were evenly distributed across the classes (Form 1 = 30%, Form 2 = 20%, Form 3 = 25%, Form 4 = 25%). This implied that the views of the students were reported across all classes. The income status of the students’ families was most frequent at medium income (80%), but least for low income (17%) and high income (3%). Considering the parenting background of students, the students living with both parents were the most frequent in the study (71%) followed by single parenthood (21%) then orphaned (5%) and divorced/separated (3%). The school type was evenly distributed (Mixed = 40%, Boys = 29%, Girls = 31%). This implied that response was sought across all schools.

Most teacher counselors (86%) and deputy head teachers (100%) had adequate years of service suitable for participating in the study. Their experiences in guidance and counseling was also adequate (Teacher counselors = 76%, Deputy Head teachers = 91%) for the study. Therefore, these demographic characteristics set a strong and reliable basis for generalization of the findings to such population as documented by Connelly (2013).

Distribution of Response on the Big Five Personality Scales

This section entitled “distribution of the big five personality” described the frequency distribution of the responses on various scales of the big five personality. This section also described the assessment of normality for such distribution as a prerequisite for all parametric tests.

Distribution of Openness

Openness to experience is one of the big five personality which sometimes is called Intellect or Intellect/Imagination. It includes traits like having wide interests, and being

imaginative and insightful (Srivastava, 2016). The table 3 provided a frequency distribution of the responses on the 10 scales used in determining the levels of openness among the respondents.

Table 3: Frequency Distribution of Responses on the Openness scales

Statements	Scales (Frequencies and Percentages)					Statistics	
	SD	D	U	A	SA	Mean	St Dev.
1. I have a rich vocabulary and need a creative outlet.	33 (8%)	62 (16%)	94 (24%)	159 (40%)	49 (12%)	3.32	1.132
2. I have a vivid imagination and I'm inventive	33 (8%)	47 (12%)	86 (22%)	166 (42%)	65 (16%)	3.46	1.147
3. I have excellent ideas and see beauty in things that others might not notice.	24 (6%)	26 (7%)	63 (16%)	183 (46%)	101 (25%)	3.78	1.084
4. I am quick to understand things and a deep thinker	20 (5%)	32 (8%)	61 (15%)	186 (50%)	98 (25%)	3.78	1.064
5. I use difficult words and I'm curious about many different things	35 (9%)	94 (24%)	79 (20%)	125 (32%)	64 (16%)	3.22	1.226
6. I spend time reflecting on things.	33 (8%)	55 (14%)	46 (12%)	189 (48%)	74 (19%)	3.54	1.183
7. I am full of ideas and formulate them clearly	21 (5%)	37 (9%)	64 (16%)	208 (52%)	67 (17%)	3.66	1.033
8. I can handle a lot of information.	28 (7%)	35 (9%)	64 (16%)	204 (51%)	66 (17%)	3.62	1.082
9. I like to solve complex problems and open to new experiences/ideas	26 (7%)	30 (8%)	62 (16%)	191 (48%)	88 (22%)	3.72	1.092
10. I always think quickly, original and comes up with new ideas	27 (7%)	28 (7%)	59 (15%)	204 (51%)	79 (20%)	3.71	1.076

The highest means were 3.78 (SD = 1.084) and 3.78 (SD = 1.064) which resulted from the response on the statements “I have excellent ideas and see beauty in things that others might not notice” and “I am quick to understand things and a deep thinker” respectively. While the lowest mean 3.22 (SD = 1.226) resulted from the response on the statement “I use difficult words and I’m curious about many different things”. Though the means (3.32, 3.46, 3.78, 3.22, 3.54, 3.66, 3.62, 3.72, and 3.71) slightly differed from each other, the standard deviations of the responses did not differ much. This indicated same spread-outedness from the means across all the statement. And since the standard deviations were low, it was therefore clear that most responses on the statements were close to the mean responses on this scale.

From the standard deviation, the normality of the distribution was not clear hence the normal Q-Q plot as displayed in figure 1 then assessed the pictorial view of normality graphically.

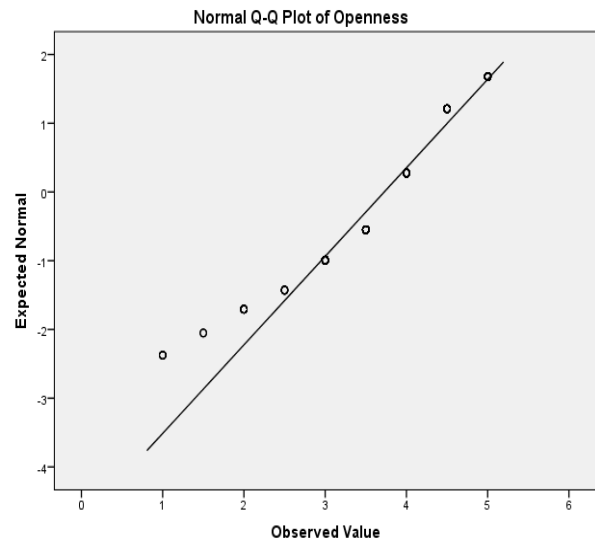


Figure 1: Normal Q-Q plot for assessing normality of Openness

The plotted points in figure 1 were tending to be closer to the line. This depicted a near normal distribution. This justified the used of parametric tests in analysis of the data related to openness (Marshall & Samuels, 2020).

Distribution of Conscientiousness

Conscientiousness is one of the big five personality defined by the traits like being organized, thorough, and planful

(Srivastava, 2016). The table 4 provided a frequency distribution of the responses on the 10 scales used in determining the levels of Conscientiousness among the respondents.

Table 4: Frequency Distribution of Responses on the Conscientiousness scales

Statements	Scales (Frequencies and Percentages)					Statistics	
	SD	D	U	A	SA	Mean	St Dev.
1. I have tendency to think things through before acting or speaking.	27 (7%)	28 (7%)	31 (8%)	182 (46%)	129 (31%)	3.90	1.136
2. I pay attention to details.	20 (5%)	15 (4%)	25 (6%)	209 (53%)	128 (32%)	4.03	0.996
3. I like seeing that rules are observed.	23 (6%)	10 (3%)	29 (7%)	204 (52%)	131 (33%)	4.03	1.013
4. I like order and self-discipline	25 (6%)	7 (2%)	13 (3%)	88 (48%)	164 (41%)	4.16	1.030
5. I like following a schedule and want every detail taken care of.	21 (5%)	20 (5%)	36 (9%)	204 (51%)	116 (29%)	3.94	1.029
6. I always makes plans and follows through with them	22 (6%)	24 (6%)	40 (10%)	215 (54%)	96 (24%)	3.85	1.032
7. I get things done quickly and perseveres until the task is finished	30 (8%)	40 (10%)	53 (13%)	199 (50%)	75 (19%)	3.63	1.127
8. I always know what I am doing.	23 (6%)	22 (6%)	37 (9%)	200 (50%)	114 (29%)	3.91	1.059
9. I keep things tidy and does a thorough job	38 (10%)	39 (10%)	44 (11%)	157 (40%)	119 (30%)	3.71	1.258
10. I always want everything to be "just right."	27 (7%)	17 (4%)	22 (6%)	178 (45%)	153 (39%)	4.04	1.107

The statement “I like order and self-discipline” attracted 164 responses at the highest mean response of 4.16 (SD = 1.030) while the statement “I get things done quickly and perseveres until the task is finished” obtained the lowest mean response at 3.63 (SD = 1.127). The standard deviations of 1.030 and 1.127 indicated that the mean of 4.16 was closer to the overall mean than that of 3.63. Therefore, the statement “I like order and self discipline” determined conscientiousness more than the statement “I get things done quickly and perseveres until the task is finished”.

Generally speaking, the means, (3.90, 4.03, 4.16, 3.94, 3.85, 3.63, 3.91, 3.71 and 4.04) if rounded off will form a whole number 4 which is equivalent to agree (A) hence most respondents agreed to the statements on this scale. Most of the standard deviations were nearly equal, an indication of a uniform flow of responses from the mean.

The nearly equal standard deviations only showed the uniform spread-outedness of the responses on conscientiousness from the means, but the normality of the distribution of responses on this scale of conscientiousness was not clear hence a pictorial view of the normality of the distribution was then assessed graphically by generating the normal Q-Q plot as displayed in figure 2.

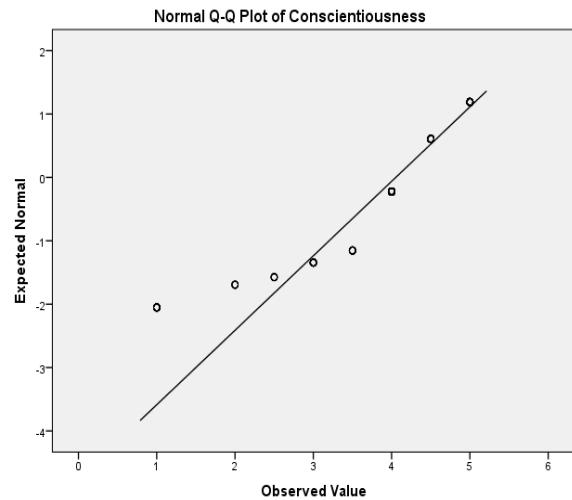


Figure 2: Normal Q-Q plot for assessing normality of Conscientiousness

The plotted points in figure 2 were tending to be closer to the line, except for the point (1,-2) which appeared some distance away. This depicted a near normal distribution because only one point was far away from the line. The point (1,-2) may have appeared that way because of inconsistency of responses among the respondents. This justified the used of parametric tests in analysis of the data related to conscientiousness (Marshall & Samuels, 2020).

Distribution of Extraversion

Extraversion, a part of the big five personality also sometimes called Surgency has broad dimensions of traits. The broad dimension of extraversion encompasses such more specific

traits as talkative, energetic, and assertive (Srivastava, 2016). In this study, 10 statements as described on the response scale

distribution of table 5 determined extraversion.

Table 5: Frequency Distribution of Responses on the Extraversion scales

Statements	Scales (Frequencies and Percentages)					Statistics	
	SD	D	U	A	SA	Mean	St Dev.
1. I feel comfortable around people.	34 (9%)	29 (7%)	19 (5%)	253 (64%)	61 (15%)	3.70	1.087
2. I always start conversations.	26 (7%)	105 (26%)	64 (16%)	162 (41%)	40 (10%)	3.21	1.138
3. I always talk to a lot of different people at parties.	62 (16%)	125 (32%)	32 (8%)	120 (30%)	58 (15%)	2.97	1.138
4. I don't mind being the center of attention.	71 (18%)	98 (25%)	66 (17%)	111 (28%)	51 (13%)	2.93	1.325
5. I make friends easily.	46 (12%)	71 (18%)	21 (5%)	180 (45%)	79 (20%)	3.44	1.304
6. I'm outgoing and sociable	50 (13%)	99 (25%)	64 (16%)	135 (34%)	49 (12%)	3.09	1.258
7. I prefer the company of others	93 (23%)	95 (23%)	50 (13%)	105 (26%)	53 (13%)	2.82	1.398
8. I can talk others into doing things	68 (17%)	92 (23%)	60 (15%)	124 (31%)	53 (13%)	3.01	1.330
9. I am always the first to act.	74 (19%)	136 (34%)	61 (15%)	85 (21%)	41 (10%)	2.71	1.278
10. I'm excitement seeking	41 (10%)	72 (18%)	49 (12%)	162 (41%)	73 (18%)	3.39	1.262

The statement “I feel comfortable around people” recorded the highest mean response at 3.70 (SD = 1.087) while the statement “I am always the first to act” recorded the lowest mean response at 2.71 (SD = 1.278). The statement “I feel comfortable around people” was much closer to overall mean response than the statement “I am always the first to act” (by studying their standard deviations). This implied, the statement “I feel comfortable around people” defined extraversion more than the other statements. This finding was congruent with the definition of extraversion by Srivastava (2016).

Analysis of the mean responses, (3.39, 2.71, 3.01, 2.82, 3.09, 3.44, 2.93, 2.97, 3.21 and 3.71) indicated responses at the mid-point of the scale (3). This implied that the distribution of the extraversion was a perfect normal distribution in the population. This results could be attributed to the fact that this scale was the first to be administered hence the participants were more accurate in reporting their feelings than on the other scales.

Analysis the standard deviations, (1.278, 1.262, 1.330, 1.398, 1.258, 1.304, 1.325, 1.138 and 1.087) depicted equal distance from the mean responses. This distribution was typical of a perfect normal distribution.

To further analyze the nature of the distribution, especially with regard to the test of normality of the distribution on the extraversion scale. The normal Q-Q plot was conducted using the explore function of the SPSS. The pictorial view of the result was as displayed in figure 3.

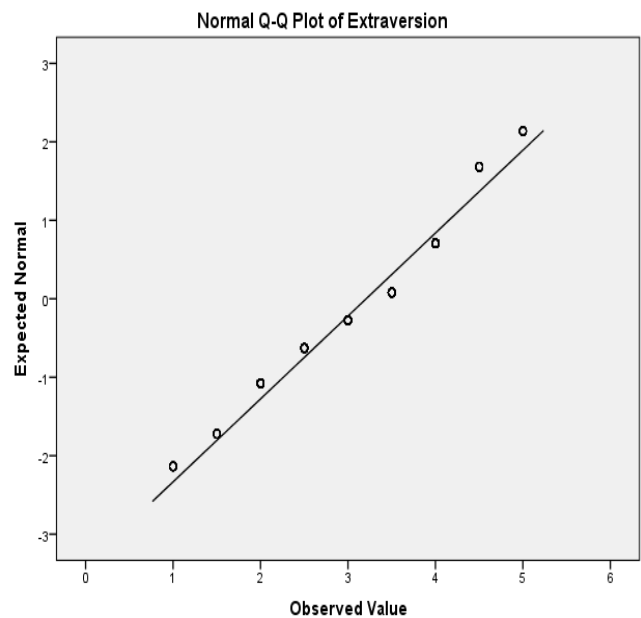


Figure 3: Normal Q-Q plot for assessing normality of Extraversion

The plotted points in figure 3 were all too close to the line. This depicted a perfect normal distribution because all points were touching the line. This justified the used of parametric tests in analysis of the data related to Extraversion (Marshall & Samuels, 2020).

Distribution of Agreeableness

Agreeableness as one of the big five personality is defined bytraits like sympathetic, kindness, and affectionate

(Srivastava, 2016). In this study, a group of 10 traits displayed on the scales as statements was used to determine

Agreeableness. The response on the scale of agreeableness was as tabulated in table 6.

Table 6: Frequency Distribution of Responses on the Agreeableness scales

Statements	Scales (Frequencies and Percentages)					Statistics	
	SD	D	U	A	SA	Mean	St Dev.
1. I believe in the sincerity and good intentions of others	50 (15%)	46 (12%)	40 (10%)	170 (43%)	91 (23%)	3.52	1.304
2. I sympathize with others' feelings.	44 (11%)	44 (11%)	41 (10%)	169 (43%)	99 (25%)	3.59	1.277
3. I am helpful and unselfish with others	36 (9%)	26 (7%)	33 (8%)	164 (41%)	137 (35%)	3.86	1.222
4. I always take time out for others.	46 (12%)	86 (22%)	62 (16%)	150 (38%)	53 (13%)	3.20	1.298
5. I often feel others' emotions.	34 (9%)	61 (15%)	53 (13%)	175 (44%)	74 (19%)	3.49	1.203
6. I like Making people feel at ease.	20 (5%)	40 (10%)	54 (14%)	196 (50%)	87 (22%)	3.73	1.069
7. I always inquire about others' well-being.	32 (8%)	66 (17%)	48 (12%)	165 (42%)	86 (22%)	3.52	1.226
8. I take an interest in other people's lives.	104 (26%)	116 (29%)	50 (13%)	88 (22%)	39 (10%)	2.60	1.342
9. I like doing things for others.	56 (14%)	102 (26%)	52 (13%)	132 (33%)	55 (14%)	3.07	1.307
10. I rarely put people under pressure.	97 (24%)	80 (20%)	40 (10%)	119 (30%)	61 (15%)	2.92	1.446

The statement “I am helpful and unselfish with others” had the highest mean response at 3.86 (SD = 1.222) while the statement “I take an interest in other people’s lives” had the lowest mean response at 2.60 (SD = 1.342). Though the means differed but the standard deviations were close. This implied the two statements were at almost equal intervals from the mean hence they were good indicators of agreeableness. Since the statements with the lowest and the highest mean were good indicators of agreeableness hence other statements were also considered good indicators of agreeableness. The statements on this scale actually described traits such as sympathetic, kindness, and affectionate which forms typical characteristics of agreeableness as reported by Srivastava (2016).

To further probe the standard deviations (ranging from 1.069 to 1.446), the variation among the statements were almost uniform as justified by the reliability statistics of the questions ($\alpha = 0.880$).

To justify the use of parametric tests on the agreeableness scales, the normality of the distribution was assessed graphically by the use of Q-Q plots. The pictorial view of the distribution was displayed in figure 4.

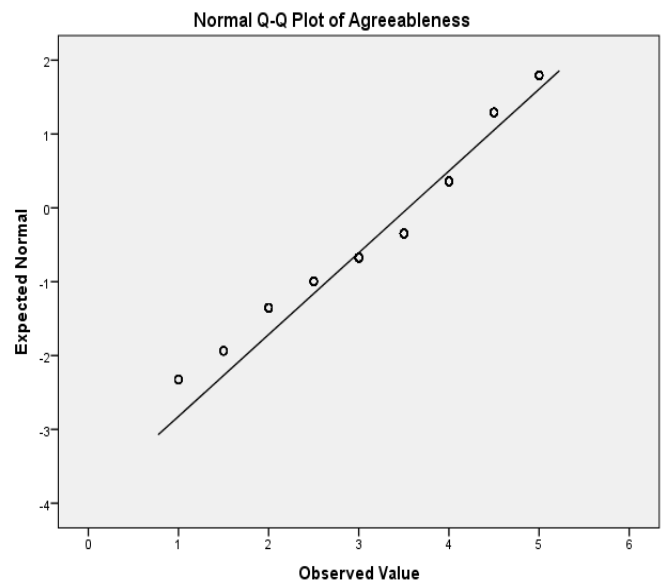


Figure 4: Normal Q-Q plot for assessing normality of Agreeableness

Since the plots were trending towards the line, a near normality was depicted hence the application of the parametric test on the distribution of agreeableness was totally justified as reflected on the literature published by Marshall and Samuels (2020).

Distribution of Neuroticism

Neuroticism is a part of the big five personality which sometimes reversed and called Emotional Stability. It includes

traits like tense, moody, and anxious (Srivastava, 2016). In this study neuroticism was determined by 10 statements rated on a five point Likert scale as tabulated in table 7.

Table 7: Frequency Distribution of Responses on the Neuroticism scales

Statements	Scales (Frequencies and Percentages)					Statistics	
	SD	D	U	A	SA	Mean	St Dev.
1. I get stressed out easily and feel threatened easily.	82 (21%)	86 (22%)	48 (12%)	108 (27%)	73 (18%)	3.01	1.434
2. I always worry about things.	40 (10%)	73 (18%)	48 (12%)	179 (45%)	57 (14%)	3.35	1.221
3. I am easily disturbed and can be tense	67 (17%)	111 (28%)	49 (12%)	101 (25%)	69 (17%)	2.98	1.382
4. I get upset easily and Am afraid of many things.	69 (17%)	104 (26%)	39 (10%)	124 (31%)	61 (15%)	3.01	1.374
5. I change my mood a lot and gets nervous easily	77 (19%)	100 (25%)	37 (9%)	127 (32%)	56 (14%)	2.96	1.384
6. I get irritated easily.	69 (17%)	109 (28%)	64 (16%)	96 (24%)	59 (15%)	2.92	1.343
7. I am filled with doubts about things	62 (16%)	117 (30%)	65 (16%)	105 (26%)	48 (12%)	2.90	1.289
8. I feel threatened easily.	92 (23%)	119 (30%)	57 (14%)	81 (20%)	48 (12%)	2.68	1.348
9. I am easily discouraged and become overwhelmed by events.	74 (19%)	106 (27%)	85 (21%)	82 (21%)	50 (13%)	2.82	1.302
10. I'm conscious about myself and feel a lot of Impulsiveness	45 (11%)	86 (22%)	97 (24%)	122 (31%)	47 (12%)	3.10	1.202

The statement “I always worry about things” recorded the highest mean response at 3.35 (SD = 1.221) while the statement “I feel threatened easily” recorded the lowest mean response at 2.68 (SD = 1.348). Though the highest and the lowest mean responses on the two statements differed, their standard deviations were almost equal. This indicated a nearly equal distance between the scores on the two statements hence depicted a high inter-correlatedness of the statements at large. This formed a good basis for the proof of the previously determined reliability statistics of the questionnaire (0.880).

The standard deviations, (from 1.434 to 1.202) were nearly equal, depicting a distribution nearing the normal distribution. Though the standard deviations gave some light on the distribution, it could not test the normality of the distribution. The Q-Q plots was generated from the explore function of the SPSS in order to help in the assessment of normality of the distribution. The pictorial display of the normality was shown in figure 5.

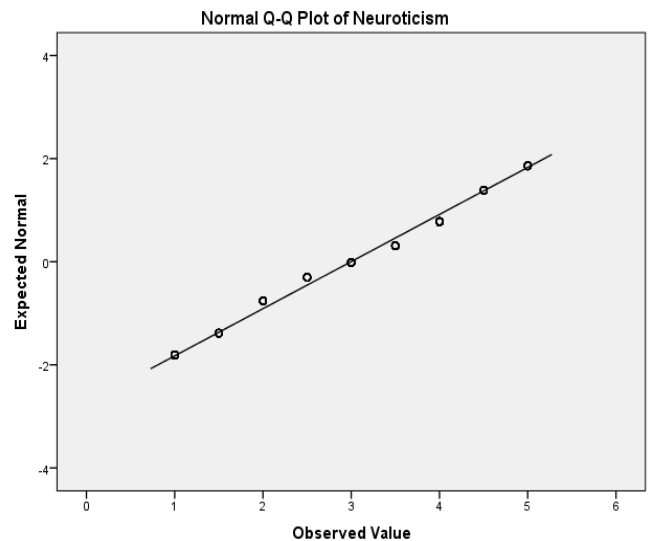


Figure 5: Normal Q-Q plot for assessing normality of Neuroticism.

The Q-Q plots for the distribution of neuroticism were joined to the line. This indicated a perfect normal distribution and a good justification for the use of parametric tests like Pearson’s product moment correlation, regression analysis and ANOVA as depicted by the literature of Marshall and Samuels (2020).

Distribution of Response on the Violence Scale

Involvement in violence was determined by 10 statements rated on five point Likert scale. The descriptive function of SPSS was used to generate a frequency distribution as tabulated in table 8.

Table 8: Frequency Distribution of Responses on the Involvement in violence scales

Statements	Scales (Frequencies and Percentages)					Statistics	
	SD	D	U	A	SA	Mean	St Dev.
1. I am not afraid to carry weapons for war	157 (40%)	80 (20%)	44 (11%)	62 (16%)	54 (14%)	2.44	1.473
2. Engaging in physical fight is my healthy way of solving disputes	208 (52%)	82 (21%)	35 (9%)	29 (7%)	43 (11%)	2.04	1.372
3. Destruction of property is the best way of demonstrating my grievances	194 (49%)	86 (22%)	53 (13%)	33 (8%)	31 (8%)	2.05	1.218
4. I like participating in violent political demos	198 (50%)	84 (21%)	56 (14%)	26 (7%)	32 (8%)	2.02	1.279
5. Engaging in violence is the best dispute resolution mechanism	213 (54%)	80 (20%)	43 (11%)	30 (8%)	31 (8%)	1.96	1.285
6. I like associating with peers who are violent	163 (41%)	96 (24%)	49 (12%)	53 (13%)	36 (9%)	2.25	1.351
7. Retaliation is the best way of quenching my anger	120 (30%)	97 (24%)	81 (20%)	60 (15%)	39 (10%)	2.50	1.323
8. I like destroying people’s property even if not provoked	251 (63%)	76 (19%)	24 (6%)	15 (4%)	31 (8%)	1.74	1.217
9. I like seeing people suffer or cry	230 (58%)	89 (22%)	28 (7%)	16 (4%)	34 (9%)	1.83	1.248
10. Causing pain to someone is the best way of playing	230 (58%)	91 (23%)	25 (6%)	16 (4%)	35 (9%)	1.83	1.254

The statement “Retaliation is the best way of quenching my anger” recorded the highest mean response of 2.50 (SD = 1.323) while the statement “I like destroying people’s property even if not provoked” recorded the lowest mean response of 1.74 (SD = 1.217). The mean responses per statement differed greatly but the standard deviations are nearly equal. This indicated a constant variance within and between the statements. This depicted some correlatedness among the statements hence the statements formed a good basis for determining the involvement in violence.

The assessment of the normality of the distribution was done graphically by the use of the normal Q-Q plots. The explore function of the SPSS was used to generate the normal Q-Q plots as pictorially displayed in figure 6.

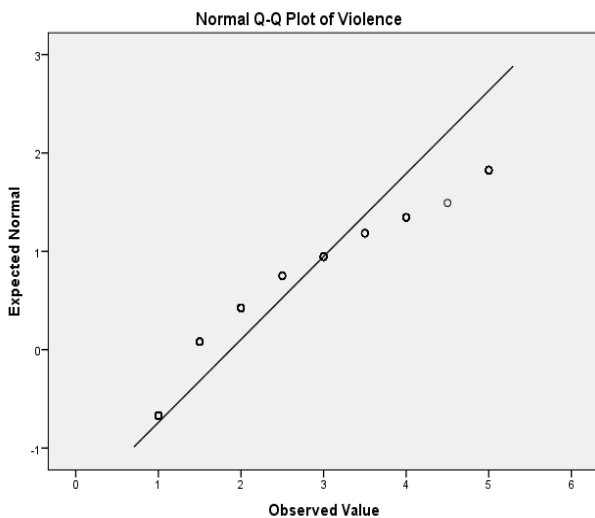


Figure 6: Normal Q-Q plot for assessing normality of Involvement in Violence.

The plots of co-ordinates (5, 2) and (4.5, 1.5) appeared far from the line, but the majority of the points were nearing the line. This depicted a moderate skewness. But still with such minimal skewness, the parametric tests can still be conducted upon transforming the variable. For the ease of analysis, the scales of risky behavior were transformed using the SPSS function transform to a single scale. This idea of transform was congruent to literature on statistics by Marshall and Samuels (2020).

Qualitative Relationship between the Big Five Personality and Violence

The qualitative relationship between the big five personality and involvement in violence was sought for by the question two of the interview schedule: “How is the big five personality related to involvement in violence among young people in this school?” Beginning with the following narrations:

“The big five personality are related to involvement in violence, but it is difficult to establish the relationship verbally” [TC 8, 9, 10, 11, 12 and 13].

“The relationship between the two exist, but it is difficult to look at it qualitatively” [DHT 4, 5, 8, 9 and 15]

Through analysis of the above narrations, six teacher counselors (TC 8, 9, 10, 11, 12 and 13) and five deputy head teachers (DHT 4, 5, 8, 9 and 15), agreed with the fact that the big five personalities were related to involvement in violence but could not describe the nature of the relationship. These findings were justified by the study conducted by (Lubomir & Jana, 2015) who reported that personality was significantly related with acute risk taking in financial sector, banking sector and everyday life. In order to improve on the above

qualitative findings, the quantitative analysis of this relationship was further conducted.

For further probing of the respondents, the following was reported:

“Most people inclined towards extraversion speak openly and this put them at risk of involving in violence. Neurotics are venerable to violence because they normally seek a sense of belonging. Agreeable people are least venerable to violence because they are sympathetic in nature. Conscientiousness individuals display minimal tendencies to violence because they always think before they act. Open minded individuals are not predictable based on involvement in violence” [TC 1, 2, 3, 4, 5, 6, 7 and 19, and DHT 2, 3, 6, 16, 17, 18 and 20].

Analysis of the above narrative revealed that a total of fifteen teacher counselors and deputy head teachers agreed to the fact that extraverts were venerable to violence because of their out-going and sociable tendencies. They also argued that neurotics had a lot of attention seeking which expose them to violence. Agreeableness on the other hand were considered sympathetic hence were less likely to engage in violence. Conscientiousness individuals were planful and thinkers hence had minimal tendencies to violence. The openness personality was unpredictable because of their imaginative and creative nature. These findings were consistent with those of (Schmitt, 2011), (Vollrath, Knoch & Cassano, 2012) and (Olalekan, 2014) who reported on the same findings.

For continuous inquiry on the subject matter, the following narratives were also noted:

“Extraverted students are more likely to engage in violence than neurotic students because the extraverts are interactive and talkative while neurotics are impulsive and possess withdrawal tendencies. Agreeable students feel for their counter parts hence less likely to engage in violence. Conscientious individuals are dutiful hence display reduced tendencies to violence. Open minded individuals are not easy describing based on their levels of engagement in violence because of their way of perception which is more complex and unpredictable”. [TC 18, 20, 21 and DHT 17, 18, 19, 21, 22]

According to the extract above, extraverted and neurotic individuals were most likely to engage in violence. The agreeableness and conscientiousness had lower tendencies to violence. The openness could be evaluated based on risky behavior profile as fifty-fifty. These findings were supported by pieces of literature of (Voracek, 2012), (Heine, Buchtel & Norenzayan, 2011) and (Joshi & Bhardwaj, 2016) who reported extraversion and neuroticism as positively correlated with risky behaviors while conscientiousness and agreeableness as negatively correlated with risky behavior.

In conclusion, the qualitative analysis of the relationship between the big five personality and involvement in violence

explained the relationship well. It even provided the direction of the relationship, but failed to show the strength or the degree of the relationship. This therefore justified the reason for conducting the subsequent quantitative analysis by the use of Pearson Product moment correlation.

The Pearson Correlation Results

The quantitative relationship between the big five personality and involvement in violence was established by using the correlate function of SPSS. The following hypotheses were tested by Pearson Product moment Correlation:

H_o [the null hypothesis]: There is no significant relationship between the big five personality and involvement in Violence.

H_A [the alternative hypothesis]: There is a significant relationship between the big five personality and involvement in Violence.

The Pearson correlation results were displayed in table 9.

Table 9: The Pearson Correlation results for the Relationship between the Big Five Personality and Involvement in Violence

Big Five Personality	Statistics	Involvement in violence
Extraversion	r	0.155
	Sig. (2-tailed)	0.002
	n	397
Agreeableness	r	-0.101
	Sig. (2-tailed)	0.044
	n	397
Conscientiousness	r	-0.425
	Sig. (2-tailed)	0.000
	n	397
Neuroticism	r	0.102
	Sig. (2-tailed)	0.042
	n	397
Openness	r	-0.187
	Sig. (2-tailed)	0.00
	n	397

The correlation is significant at the 0.05 level (2-tailed)

According to Blalock (2012), the degree or the strength of correlation is explained as: for values of correlation coefficient $r = +1$ or -1 , the correlation is deemed perfect; for values of correlation coefficient $r = +$ or -0.5 and above, the correlation is deemed high; for the values of correlation coefficient $r = +$ or -0.25 to $+$ or -0.5 , the correlation is deemed moderate; for the correlation coefficient $r =$ below $+$ or -0.25 , the correlation is deemed of low degree; while for values of coefficient $r = 0$ depicts no correlation. On the other hand, the signs (either negative or positive) indicate the direction of the relationships (Blalock, 2012). This interpretation was applied on the analysis of data from table 9.

Though the degrees of correlations were low, Extraversion was positively correlated to violence ($r = 0.155$). This implied that the participants who displayed higher levels of extraversion possessed higher tendencies to involvement in violence. In comparison to the other big five personalities, extraversion displayed the highest positive correlativeness to the involvement in violence. These findings were consistent with those of (Schmitt, 2011) who reported that Sexual promiscuity and violence were somewhat related to neuroticism and openness as well, but was more highly related to extraversion. Similarly, Nidhi and Prerna (2010) also reported that Risk taking was found to be minimal among introverts and maximum among extroverts.

At minimal degrees of correlation, Agreeableness was found to be negatively correlated to violence ($r = -0.101$). This implied, increased levels of agreeableness among the participants tended to reduced levels of involvement in violence. These findings were consistent with those of (Vollrath, Knoch&Cassano, 2012) which reported that the personality dimensions of Agreeableness and Conscientiousness had negative direct effects on perceptions of susceptibility as well as negative indirect effects through risky health behaviors. Similarly, (Chraif, Mihai, Vlad Burtăverde & Teodor, 2015) also reported that aggressive driving (an example of violence) was negatively related to emotional stability, agreeableness, and conscientiousness.

At moderate degrees of correlation, Conscientiousness had strong negative correlation to violence ($r = -0.425$). The participants who displayed more of conscientiousness were least likely to be involved in violence. These findings were supported by (Olalekan, 2014) who reported that the conscientiousness predicted personality safety of health risks. Similarly, (Chraif, Mihai, Vlad Burtăverde & Teodor, 2015) also reported that aggressive driving (an example of violence) was negatively related to emotional stability, agreeableness, and conscientiousness.

At minimal degrees of correlativeness, Neurotic tendencies were found to be positively correlated with violence ($r = 0.102$). The participants who displayed more of neuroticism tended to be more involved in violence. This may be attributed to have resulted from their disposition of traits like anxiety and panic. These findings on neuroticism were consistent with those of (Krista, Jeffrey, Henry & Paul, 2002) who reported that Neuroticism facet of impulsivity indicated an inability to resist cravings and urges. Moreover, (Slavinskienea & Matulaitieneb, 2016) reporting on the study aimed at identifying personality profiles in the sample of traffic offenders, indicated that those who had higher expression of impulsiveness, aggression and neuroticism (high risk personality profile), consume alcohol in a hazardous and harmful way. To add on, (Merritt & Ian (2012) also reported that greater reckless risk taking behaviors were associated with high neuroticism and low conscientiousness.

At low degrees of correlativeness, Openness had a negative correlation to involvement in violence ($r = -0.187$). Therefore participants who had high incidence to openness displayed decreased tendencies to involvement in violence. These findings were corroborated with those of (Erdinc & Battaglio, 2015) who reported that Openness was important in the analysis of decision-making subjects, tasks and contexts. This may be attributed to the fact that open minded individuals have high imaginativeness and creativity, that their incidence to risk were circumstantial.

Upon testing the hypotheses H_0 and H_A , the 2-tailed significant levels in table 9 were used. The 2-tailed significant levels were then divided by two in order to obtain the directional significant levels for making decision on whether to accept or reject the null hypothesis H_0 . The directional significant levels (0.000, 0.001, 0.007, 0.011, 0.0115, 0.014, 0.020, 0.021, 0.035, 0.045 and 0.13) were found to be less than the set significant level (0.05) hence the null hypothesis H_0 was rejected and the alternative hypothesis H_A was accepted. The results were therefore generalized as: "There was a statistically significant relationship between the big five personality and involvement in violence". These findings were justified by the study conducted by (Lubomir & Jana, 2015) who reported that personality was significantly related with acute risk taking in financial sector, banking sector and everyday life.

Generally, both qualitative and quantitative discussions on the relationship between the big five personality and involvement in violence converged in that they elaborately explained each other by providing similar findings on the relationship between the big five personality and involvement in violence. The coherency in the results may be attributed to the use of appropriate scientific procedures in the inquiry.

IV. CONCLUSION

In conclusion, the big five personalities: extraversion, agreeableness, conscientiousness, neuroticism and openness were found to be correlated significantly to the involvement in violence. The participants who displayed higher levels of extraversion possessed higher tendencies to involvement in violence. In comparison to other big five personalities, extraversion displayed the highest positive correlativeness to the involvement in violence. Agreeableness was more negatively correlated to violence. This implied, increased levels of agreeableness among the participants tended to reduced levels of involvement in violence. Conscientiousness was more negatively correlated to violence. The participants who displayed more of conscientiousness were least likely to be involved in violence. Neurotic tendencies were more positively correlated to violence. The participants who displayed more of neuroticism tended to be more involved in violence. Openness had negative correlation to involvement in violence. Therefore to minimize involvement in violence, more interventional measures should be applied to people who display more of extraversion and neuroticism.

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